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ABSTRACT

Focusing on the problem of authority, an analysis of the theories of Max Weber, James D. Thompson, and Elliott Jaques forms the basis for this proposal for improved organizational effectiveness in public schools. Basic assumptions are that modern organizations are established and operated under rational principles and subject to rational analysis, that in order to improve an organization's effectiveness administrators must act on its structure, and that in changing this structure administrators modify authority relationships between members. Thus, if fashionable but cosmetic remedies are imposed, schools' deep-seated structural problems are neglected. The organizational structure of schools can be improved by working for greater congruence with a triadic model granting each staff position, except teachers, requisitely rational authority--involving two-way accountability--over subordinates. Practical recommendations drawn from the model include: granting principals more authority; clarifying the limits of authority of intermediate assistants, thereby placing principals and teachers in more direct contact; redefining the role of vice principals as buffering principals and teachers from environmental turbulence; defining accountability relationships more clearly; implementing school-based budgeting; and improving teachers' access to principals and chief executive officers. An alternative theoretical analysis is summarized which implies that principals' main task is to buffer teachers from the disturbances of administrative bureaucracy. (MJL)

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Rationality, Authority and Spindles: An Enquiry into Some Neglected Aspects of Organizational Effectiveness and a Partial Application to Public Schools

by

Derek J. Allison

March 1980

EA 016 140

A psychologist, an anthropologist and an organizational analyst were engaged by the managing board of a very large and successful restaurant chain to discover why, in spite of excellent wages, fine working conditions and the high prestige of the organization, the morale of the staff was so embarassingly low. Why did waitresses dissolve into tears, cooks stalk off in indignant huffs and managers become so upset as to summarily fire such employees?

After each of the experts had studied a sample of restaurants, they presented their individually determined conclusions to the board. The psychologist defined the problem as one of stress with overtones of sibling rivalry.

"It is during the rush hours" he explained, "that your human relations problems arise .... Psychologically speaking, we can see that the manager is the father figure, the cook is the son and the waitress is the daughter. Now we know that in our culture you don't have daughters giving orders to sons. It louses up their ego structure. What we've got to do is to find a way to break up the face-to-face relationship between them. Now one idea I've thought up is to put what I call a 'spindle' on the order counter .... It is a kind of wheel on a shaft with little clips on it so that the waitresses can put their orders on it rather than calling out orders to the cook."

The anthropologist reported next. He explained the problem in terms of conflicting value structures within the context of the Protestant Work Ethic.

"We anthropologists" he began, " know that man behaves according to his value systems. Now, the manager holds as central value the continued growth and development of the restaurant organization. The

cooks tend to share this central value system, for, as the organization prospers, so do they. But the waitresses are a different story. The only reason most of them are working is to supplement the family income. They couldn't care less whether the organization thrives or not, as long as it's a decent place to work. Now, you don't have a non-central valuc system giving orders to a central value system. What we do is find some way of breaking up the face-to-face contact between the waitresses and the cook. One way that has occured to me is to place on the order counter an adaptation of the old-fashioned spindle ...."

The organizational analyst appeared last.

"Gentlemen," he said, " your problem could serve as a case study in discussions of organizational effectiveness. The organizational structure in your restaurants is out of whack with the technology and thus the manager is placed in a position where he is forced to exercise his authority on less than solid grounds. What happens is that the waitresses are trying to fill their orders quickly and efficiently, while being politely attendant to other customers' needs. During rush hours this means they are constantly badgering the cooks who are faced with many different orders, but cannot easily get on with their cooking because they are not setting their own priorities and are spending too much time listening to the demands of the waitresses. What we need to do is to better insulate these two productive sub-systems from each other. This will allow both the waitresses and the cooks to get on with their own tasks and the manager can then concentrate on personnel performance within these two spheres of competence rather than the contact point between them. What I suggest is a little invention of mine called the revolving spindle ...."

When the organizational analyst had left the board spent several hours discussing which expert was right. Eventually it was recognized that each had proposed the same solution. The innovation was adopted and was a great success. Soon it was copied by other restaurants and over time became recognized as the one device that served to reduce human relations problems in restaurants more than any other.

This tale was adapted[1] from Porter's (1968) original account and it serves to introduce the three themes pursued in this paper: rationality, authority and organizational effectiveness. In the parable of the spindle, the management board was attempting to increase the organizational effectiveness of their restaurants. The actions taken by the board were based on assumptions of rationality: experts were consulted, their analyses considered, a plan was devised and action was taken. Each of the experts offered a different explanation of the situation they observed in the restaurants. None of these diagnoses was necessarily correct, but each was rational within a given conceptual framework. Similarly, if a clutch of experts in the field of organizational effectiveness had been engaged to investigate the problem, an equally varied set of explanations would probably have been forthcoming. Perrow (1977), for instance, may have employed his notion of "Gross Malfunctioning Analysis," Evan (1976) his "systemic process" approach , while Mott (1972) may have based his analysis on the inability of each restaurant to adapt in the face of serious problems. The analyses that could have resulted would probably have provided valuable insights and would likely have been rational within their appropriate conceptual parameters. However, "rational" does not necessarily imply "right" when we are dealing with a varied set of conceptual models, for the congruency of these models to the reality they purport to represent is on a different order of analysis.

However, the main point is that modern day organizations are established and operated according to assumedly rational principles and are usually considered to be capable of rational analysis within the limitations of a given frame of reference.

In the case of the spindle, the directors were not required to decide which analysis or which conceptual model was right, for each expert offered the same solution. Hence the wise (and rational) thing to do was to act pragmatically. Administrators may rarely enjoy such clear cut situations in making decisions and may frequently be forced to make choices on the basis of the analysis offered by the expert, which takes us back to the validity of the underlying theory, the correctness of the analysis and a host of other factors.[2] But this is not the immediate concern except insofar as it highlights the break-point between conceptual analysis and administrative action, for however our decision makers make up their minds, they face the "real world" task of implementation. A major assumption of this paper is that in attempting to improve the effectiveness in an organization, administrators must act, directly or indirectly, on the structure of the organization. This is what happened in the case of the spindle, for the introduction of this simple device restructured the organziation concerned. Porter (1968) observes that the spindle serves at least these functions: it buffers the cooks from the waitresses, it queues the orders (not the waitresses), it serves as a sorting device, and as a memory register that provides a permanent record for the correction of mistakes and the allocation of blame should this be necessary. These functions modify the organizational structure primarily through a redefinition of the authority relationships between waitresses, cooks and managers.

This brings us to the final theme to be introduced - authority, for in designing and redesigning the structure of organizations, administrators adjust the relationships between members, and thus modify the authority of some members over others. The main object in the remainder of the paper is to outline a number of principles that could be followed in attempting such modifications. The intent is to seek some precriptions for improved organizational effectiveness in schools. The method will be to consider the analyses offered by the prominent scholars of organizations, and seek points of agreement.

The Experts

The three experts recruited for this discussion are Max Weber, James D. Thompson and Elliott Jaques. Weber's (1947) comments on rationality and authority in contemporary organizations are widely acknowledged in the literature and should not be ignored in any attempt to design effective organizations. Jaques has been involved in a consultative and analytical role with a number of organizations over the past several decades, chief of which is *Glacier Metal* in the United Kingdom. He has made a number of salient contributions to the literature and developed several novel conceptual models, most of which are summarised and integrated in his (1976) recent *A General Theory of Bureaucracy*. Jaques real fame may lie in the future as his work becomes better known and his Canadian heritage is rediscovered. James Thompson remains a pre-eminent scholar in the field and his (1967) "Organizations in Action" is a seminal work that synthesizes earlier contributions and outlines many directions still to be explored in organizational studies. This book provides a starting point.

Modern Organizations as Rational Objects

Thompson (1967:4-13) begins his consideration of organizations by drawing the now familiar distinction between open and closed system models. Taylor and Weber are identified as providing examples of the closed system strategy. Hence Weber's outline of bureaucracy is viewed as containing a determinate number of elements that are only considered to vary to the extent that the administrator or analyst considers appropriate. Furthermore, the ultimate criterion in the design and management of such organizations is held to be that of efficiency. Because the system is closed and the desired state of affairs known, then models employing this approach (and hence the reality they represent) are considered to be inherently rational.

Open system analysis is, at least in an extreme form, essentially non-rational. The "discovery" of the "informal" organization and the emergence of contingency approaches that place stress on commerce between organizations and their environments, both introduced uncertainty into organizational analysis: not all the elements in a system could be known, cause and effect relationships become indeterminate and dysfunctions can be expected. To a large degree this approach reflects an attempt to more closely approximate reality, for the open system is an analogue of the 'natural' state taken by active entities of all kinds. But while the open system strategy may aid comprehension of the "state of being organized" this may be of little value in the pursuit of increased efficiency and effectiveness in human organizations.

Thompson (1967:9-10) sought to steer a middle passage between the mechanistic determinance of the 'closed' approach and the homeostatic indeterminacy of the 'natural' models by building on the Simon-March-Cyert

notions of bounded rationality. He (1967:8) observed that, despite the 'naturalness' of open system models,

> ... millions live each day on the assumption that a reasonable degree of purposeful, effective action will be forthcoming from the many complex organizations on which they depend. Planned action, not random behavior, supports our daily lives. Specialized, controlled, patterned action surrounds us.

In other words, in our dealings with organizations and in much of their internal functioning, rationality is an operative concept. But, he suggests, there are limits to the extent of this determinacy. Within the technical core of organizations a certainty of outcomes obtains and criteria of efficiency are relevant. However, this *technical* rationality is shielded or 'sealed off' from environmental uncertainty by a number of control processes and structural units, subject to norms of *organizational* rationality. In the simplest case, the units that 'buffer' the technical core deal with input-output and coordinative processes and because they are, of necessity, in contact with the environment, organizational rationality evidences the uncertainty of open systems and satisficing, rather than maximizing, is an appropriate norm.

In essence, then, Thompson's analysis rests on a recognition that organizations operate "under norms of rationality" but because different elements of an organization are forced to deal with differing degrees of uncertainty, the degree of determinacy that obtains will also vary: operations within the technical core will evidence a relatively high degree of certainty and predictability; activity in peripheral, environmentally connected sectors will be less determinate.

Weber was portrayed by Thompson as being overly concerned with rationality in the establishment, operation and analysis of bureaucracies.

However, Weber (1947) approaches the issue of rationality within a broad socio-historical context, and in doing so provides a defense for his allegedly closed model of bureaucracy and a further argument for the consideration of modern-day organizations as primarily rational structures. He (Weber, 1947: 78) recognises two broad types of rationality: that which is concerned with calculated choice between alternate means and various ends, and that which is based on absolute commitment. The two types are logically exclusive as a basis for social action, but provide perennially valid orientations throughout human history. However, calculable rationality is considered by Weber to be the ideally-typical basis for action in modern capitalistic societies. Absolute rationality, which is associated with a commitment to an ideal, a cause or a charismatic personality, may seem irrational to an outside observer, but is perfectly logical to those that act according to the relevant rules. The mass suicide at Jonestown provides an illustrative example. But values and standards of normative behavior may become institutionalized in a social system to such a degree that they provide cutomary or traditional bases for action. A timely illustration of this is provided by the resurgance of the traditional Muslim values in Iran. To Westerners socialized to norms of calculable rationality, the behavior of contemporary Iranian personages may seem irrational, while it may be perfectly rational to traditional Muslim adherents in that nation.

The main point, however, is that Weber viewed modern organizations in Western society as being established and operated on systems of calculable rationality. Traditional, and to a large degree absolute, values have been replaced by a high reliance on calculability:

> The fate of our times is characterized by rationalisation and intellectualism and above all, by the 'disenchantment' of the world ...

> there are no mysterious incalculable forces that come into play ... one can, in principle, master all things by calculation.
> (Weber, 1948:155,139)

This type of rationality, Weber argued, is evident in commercial, industrial, organizational and even recreational aspects of modern day life, but is exemplified in the scientific approach to the phenomenal world. In the study of organizations this means that bureaucracy becomes a paramount form, for the Weberian model of bureaucracy is, of course, based on rational-legal, as opposed to traditional or charismatic authority. Except for the usage of custom, the term 'legal' could be conveniently dropped from the term 'rational-legal', as Weber's approach considers all types of authority to have a basis in law - it is the element of calculable rationality that is important.

Having briefly surveyed the various forms of rationality identified by Weber we must also recognize that he was perfectly aware that most social action is influenced by a varied set of conditions and forces. Thus in order to provide firm bases for analysis he relies heavily on ideally-typical models of human action and social phenomena. These pure types were not intended to provide accurate description but to serve as reference and starting points in analysis. Hence in the analysis of any given organization Weber would expect that some aspects could be congruent to his bureaucratic type, while others would be more akin to other types of organization identified in his works, which are based on either traditional or charismatic types of authority. Of most interest is the set of organizations based on traditional norms, for Weber considered that even in the climate of intellectual-rationalism of the twentieth century, custom and habit are a significant influence on social action.

In sum Weber's position may not be that different from Thompson's. Both recognize different types and degrees of rationalism and both consider that modern organizations are established and operated in accordance with norms of calculable rationality. They differ in that Thompson identifies turbulent environments as the major source of uncertainty, while Weber attributes this to the nature of man himself which would seem to nurture various kinds of non-rational action. The other major difference is that Weber did not really devote much attention to organizational studies. His bureaucratic model represents his most intensive effort and is developed because it reflects what he considered to be the specifically modern type of organization. For the most part he was interested in socio-economic cultures within the broad sweep of human history and thus 'organizations' were just one of a large set of variables. In other words, his organizational models do not provide a 'complete' account, but offer a beginning, whereas Thompson's models are much more mature.

Structure and Authority in Rational Organizations

To some degree Jaques' work provides a much needed extension of Weber's original thoughts. He (Jaques, 1976:49) defines bureaucracy as:

> a nierarchically stratified managerial employment system in which people are employed to work for a wage or salary; that is to say, a stratified employment hierarchy with at least one manager who in turn has a staff of employed subordinates.

The similarity of this definition to some of the prominent features in Weber's conceptualization is obvious. Other points of agreement are also present, one of which is that a bureaucracy is an organization of employees who are under contract to an analytically and structurally independent body: the managing board of Porter's restaurant chain; the

elected school board in a given region. Another point of similarity, which is not made explicit by Jaques, is the highly contemporary nature of such types of organization: they cannot exist unless the concepts of contract, accountability and salaried employment are well established and widely accepted in a society. This requires, of course, the wide spread acceptance of intellectual rationalism for these concepts rest on calculability.

But the point of most interest at this time is the congruency between the approaches of Jaques and Weber to organizational structure and authority. Both speak of hierarchical structures and both stress the importance of intellectually valid authority. However, Weber does not elaborate on the nature of bureaucratic hierarchies except to say they will be rationally designed so as to provide for subordinate accountability and supervision and to resolve internal conflicts. Jaques' presents a more thorough analysis.

Figure 1 reproduces the basic structural unit in his (1976:62) model of bureaucracy. Each of the positions in this triad represents a role occupied by an employee and although the figure shows both of the administrative positions as having only one subordinate, in reality they could have a number of such positions depending upon the span-of-control that obtains. The figure is not meant to represent all the positions in a given organization, but merely the three-level accountability system that is characteristic of rationally normed organizations. Hence a large bureaucratic hierarchy can be conceptualized as a chain of accountability triads as shown in the figure 1 inset.

In Jaques' (1976:62-86) analysis, the importance of the three-level chain in Figure 1 lies in the manner in which the occupants of each position are mutually accountable to each of their immediate

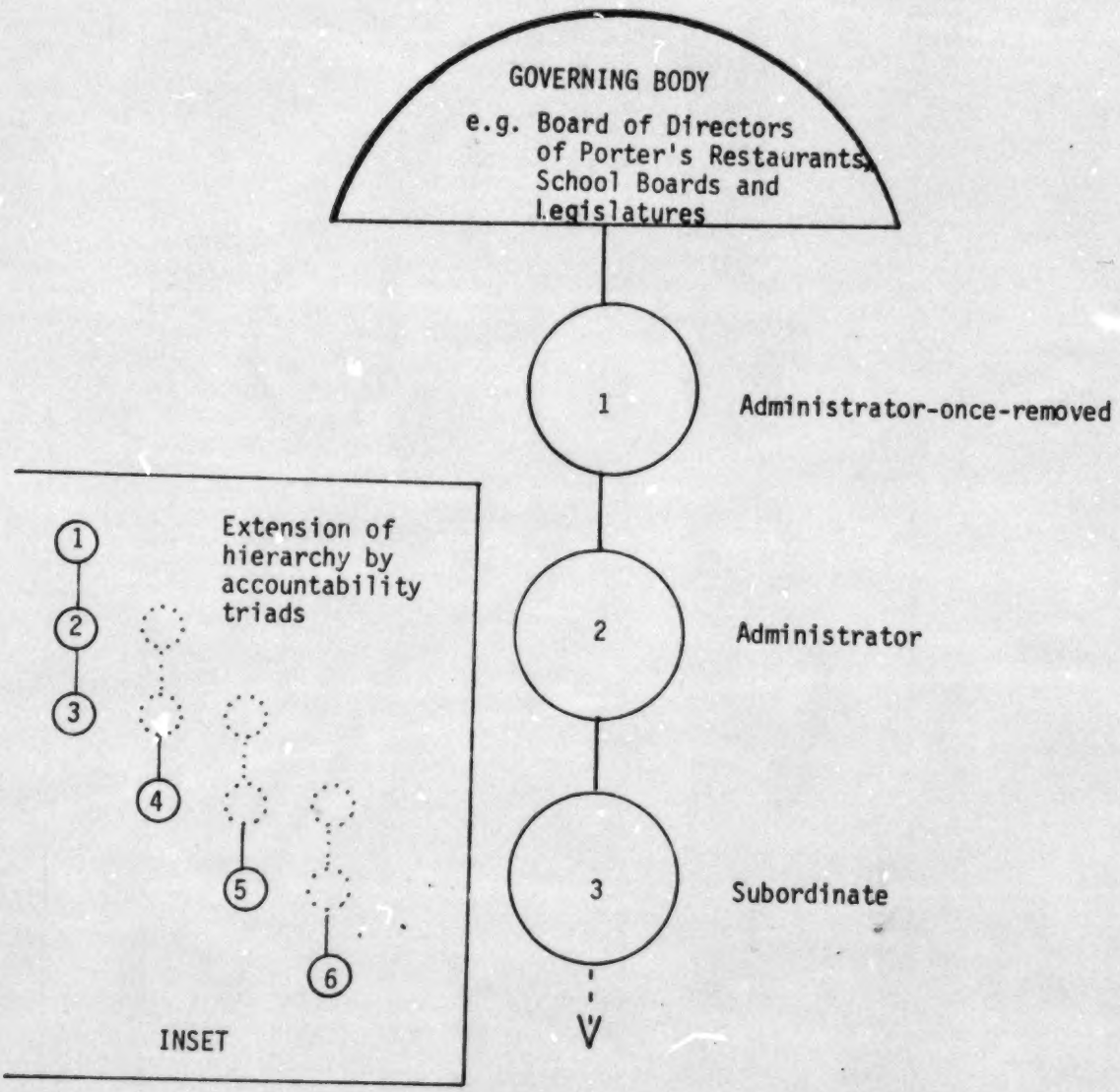

Figure 1

BUREAUCRATIC ACCOUNTABILITY TRIAD

(From Jaques, 1976:63)

super- or sub-ordinates: the subordinate is accountable to his administrator for the work he does and the administrator is accountable to *his* superordinate (the administrator once removed) for his work. But in order to discharge their respective responsibilities, the occupants of superordinate positions must rely on the performance of their subordinates. This situation is characterized by highly emotional, ethical and technical problems. In order to accommodate these Jaques argues that the authority accorded to each of the administrators must be *requisite*. This term denotes a key concept in Jaques' work, the full meaning of which is developed throughout the book. In summary, however, it means "called for in the nature of things including man's nature." (Jaques, 1976:6) Hence, on the strength of the arguments presented previously, it is not inappropriate to suggest that calculable rationality provides a base for the determination of requisite authority in modern day organizations, especially when we are considering authority that relates directly to the work that is done in organizations, that is, the activities within the technical core.

This view is strengthened by Jaques' (1976:69-71) outline of the requisite authority necessary for the effective functioning of the accountability triad. If the administrator is to be held accountable by his own superordinate then he must have the authority:

1. to decide what tasks are to be delegated to his subordinate;
2. to decide what organizational resources he will allocate for the performance of these tasks;
3. to veto the appointment of a subordinate whom he does not consider to be competent to carry out the assigned tasks;
4. to assess the performance of his subordinates;
5. to impose a negative sanction of some kind (withholding a pay increase or placing a negative appraisal on record) if the level of performance is sub-standard; and

6. to decide whether the subordinate is competent to remain in his position and report this decision to his administrator (who must then act).

The authority to assign tasks and resources is recognized as "one of the central features of management." especially as this allows an administrator to "expand and contract the discretion and resources of a subordinate" (Jaques, 1976:70). Moreover, should the subordinate determine his own tasks, or should these be assigned by someone other than the immediate administrator, then the administrator can manifestly not be held accountable by the administrator-once-removed for the results. This view is similar to that advanced by Thompson (1967:118-120) and is highly congruent to the assumptions underlying Weber's account of rational authority.

The authority to veto appointments, assess performance, impose a negative sanction and recommend transfer or termination is necessary if the administrator is to be held accountable, for without this authority, he has no legitimate grounds on which to influence his subordinate and no way of holding his subordinate responsible to him. Jaques' (1976:66) points out that should the subordinate be derelict in performing his tasks then the administrator is "let down" and cannot discharge his own reponsibilities to the administrator-once-removed: each administrator is vulnerable to the quality of his subordinates' performance. In certain situations this could lead to subordinates being able to 'dismiss' their administrator by constantly performing at a sub-standard level of competence. This is a requisite and rational reason for the administrator to be accorded the authority to assess, sanction and dismiss subordinates. It is also requisite and reasonable within the context of Thompson's concepts of technical and organizational rationality, and Weber's model of contemporary, intellectually rational society.

But to many, such an arrangement may seem potentially autocratic, and thus objectionable. Both Jaques and Weber provide strong arguments to reject this view. First there is the self-regulating property of the hierarchy itself. Each member is accountable to a superordinate, thus each member is subject to the type of authority he himself exercises: the administrator-once-removed has veto, assessment and dismissal authority over the administrator, and his superior over him and so on up to the governing sub-system. Secondly, all of the employees act within several "institutional contexts" (Jaques, 1976:68) or "systems of order" (Weber, 1947:130). There will be internal policies and regulations established by the governing body, conditions specified in employment contracts and collective agreements and the whole will be subject to the law itself. These systems of order impose a set of normative standards within which all the employees act and which serve to influence, regulate and constrain their behavior. Furthermore, the way in which these are established, and the manner in which people orient their actions within the bounds imposed, is once more explicitly rational. A major effect of this system of order is to protect subordinates from unauthorized or inappropriate actions by their superordinates. One such universal provision in rational organizations is, as Weber points out, the subordinate's right of appeal to the administrator-once-removed or the governing board.

The distinction between autocratic and rational authority over subordinates can be further illustrated by once more following Weber. Consider, for example, the situation that can obtain in a traditional or charismatic, rather than a rational, organization. Persons in positions of authority, such as sultans or satraps, barons or ayatohlas, Mafia

bosses or messiahs, can impose obligations on and take actions towards their subordinates and subjects in a much less constrained and regulated fashion. Their authority may be limited by precedent or custom, or they may well be free to act according to their personal whim of the moment. This is autocracy. The requisite exercise of authority within the delimited context of modern organizations is merely rational.

Increasing Organizational Effectiveness

To this point we have concentrated on assembling a number of notions relating to the appropriate design of modern organizations. According to the logic developed, 'appropriate' can be taken as meaning that which provides for the requisite (i.e. rational) exercise of authority. Furthermore, Thompson's propositions state that activities directly related to an organization's technology will be more amenable to requisitely rational control than will those that are more directly connected to the environment. These concepts provide the ingredients for a fourth explanation of the problems in Porter's restaurants.

In Thomspon's terms the technical core of such organizations will be found in the kitchen. Here the tasks are highly determinate and evidence a high degree of calculable rationality: there is only one 'right' way to boil an egg, or prepare veal *cordon bleu*, or a pizza. Particular restaurants may have their preferred ways, but if they do they will stick to it. Macdonald's is a good example - identical coast-to-coast dishes. The waitresses represent a specialized environmental linkage unit and operate in a far more turbulent field.[3] According to Thompson, then, the 'buffer' function served by the spindle is crucial, for this allows the technical core to be 'sealed off' from the environmental influences acting on the waitresses. However, the spindle does this by

allowing each waitress to communicate with the kitchen without having to give orders to the cooks. This feature was identified by all of the experts retained by the managing board as the crux of the matter in the pre-spindle situation. (Non-central 'value systems' giving orders to central value systems; 'daughters' giving orders to 'sons'; specialists giving orders to non-specialists.) This raises the question of the requisitely-rational structure of these organizations.

Figure 1, and the related exposition argues that within a requisitely-rational organization all employees except the chief executive must have an administrator to whom they are accountable. In Porter's restaurants both the cooks and waitresses were accountable to the manager. This is irrational in Weber's terms and non-requisite in Jaques': each cook should be accountable to a head cook, each waitress to a head waitress. The head waitress, head cook and manager could then be arranged in an accountability triad with the head waitress as the 'subordinate' (position 3), the head cook as the 'administrator' (position 2) and the manager as the administrator-once-removed. Alternately, the head cook and waitress could both be appointed department heads on the same stratum in the hierarchy, which would conform to the administrator level in Figure 1. Either of these alternatives could be considered requisitely-rational and either would probably solve the personnel problem, providing the occupants of the administrative positions were accorded requisitely-rational authority as outlined on pages 13 and 14 above. The head cook would decide and allocate tasks in the kitchen and thus resolve the confusion, the head waitress would ensure that only competent waitresses were employed and the manager would only fire employees on the recommendation of the appropriate department head. The spindle may still be useful, but most of its functions

will now be discharged by rational administrative action.

To complete this application of the principle developed above, we can note that the introduction of the accountability triad would also structure the organization to better conform to Thompson's technical/ environmental sub-system approach. Each department is better buffered from the others by the appointment of an administrator and is able to better specialize within its own terms of reference; sub-system differentiation is aided, but coordination and control within and between the functional units is improved. At this point we may note that the spindle does nothing to help define responsibilities and accountability relationships, and thus helps little in the development of improved coordination and control.

However, we may imagine that if the board of directors had been presented with this analysis and the three experts that argued only for the spindle, then the spindle would have been the remedy attempted. This would be so for several reasons:

1. The validity of this analysis is just as suspect as the others. That is to say the congreuncy of the requisite-rational model of organizations to the reality of any given situation is as difficult to demonstrate as is that of the sibling rivalry or the value consensus model.

2. The complete re-design of the organizational structure of the restaurants is much more difficult than placing spindles on counters.

3. It is also much more costly[4], not only in terms of an increased salary bill but also in terms of the time and training required.

4. The spindle offers a much more novel and ideologically acceptable solution. Analyses based on Weberian bureaucracy and the rational structuring of authority may well seem passé to graduates of contemporary business schools.

Nevertheless it is suggested that the adoption of the spindle solution would lead to only a superficial improvement in the organizational

effectiveness of the restaurants. In Porter's parable the immediate problems were resolved, but according to the Thompson-Weber-Jaques concepts this was accomplished by merely 'tinkering' with the organizational structure. But this was probably 'good enough' - it was a satisficing not a maximizing solution - and this, of course, is to be expected when norms of 'organizational', 'traditional' or 'non-requisite' rationality hold sway, as they may be expected to do so in those units of an organization located far from the technical core and in close contact with the environment, as is the case with governing boards.

Some Applications to Public Schools

Restaurants are not schools, but 'spindle' type solutions to problems of organizational effectiveness may be quite common. Chief Executive officers, Trustees, Ministries and Legislatures may well impose novel and fashionable 'solutions' on their schools in an attempt to make them more effective. The results achieved may not be as spectacular as in Porter's parable, but the effect may be similar: deepseated structural problems will be masked or disregarded and hope for improved performance will be vested in what may be merely cosmetic changes. The situation is, however, much more problematical and fraught with danger in the case of schools, for the 'experts' that propose solutions seem to rarely agree. Thus the environmentally linked policy and decision makers may well act almost at random.

But the thesis developed in this paper is that organizational effectiveness can be improved by attempting to ensure that organizations acting within contemporary cultural norms are structured to allow the requisitely-rational exercise of authority with the congruency to an ideal-type model of this structure increasing towards the technical core

of the organization. In attempting to apply this model to public schools we need to identify the technical core of these organizations and the accountability triads that make up the organizational structure.

Figure 2 summarizes the situation that could be held to obtain in secondary level public schools on the basis of the organizational charts in many school systems and text books. Six distinct authority positions are identified which provides for five accountability triads if the board - Chief Executive Officer - Assistant Superintendent set is

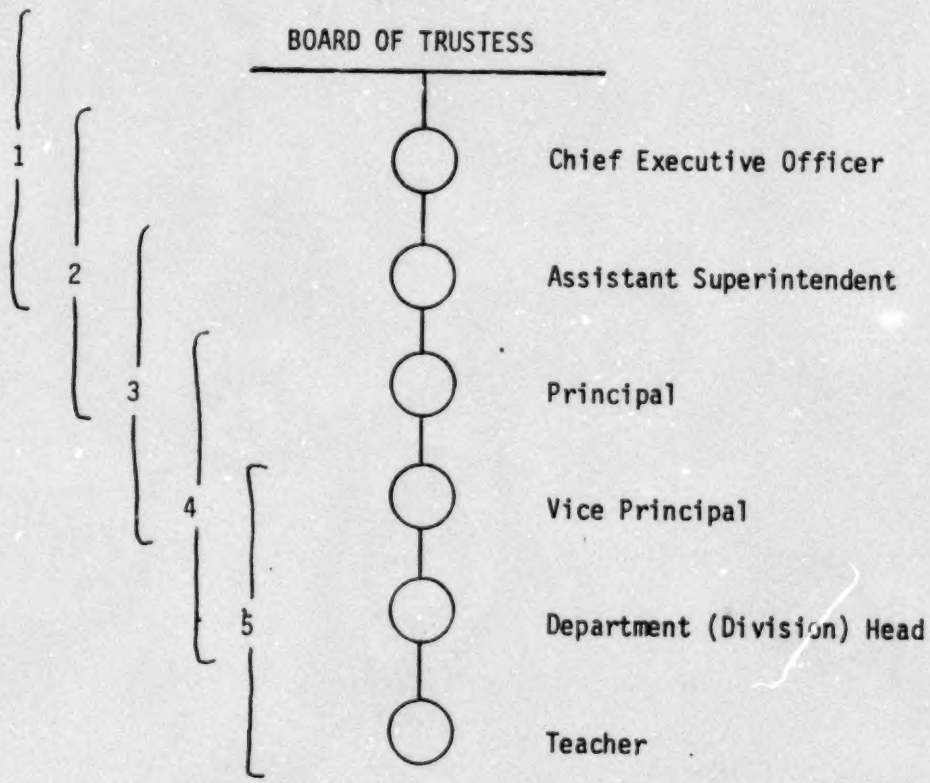

Figure 2

"STANDARD" AUTHORITY-ACCOUNTABILTIY
CHAIN IN PUBLIC SCHOOLS

included. The technical core is assumed to be defined by the teaching activities in the school itself; that is to say the core technology is that of classroom teaching.

It would seem to follow from the ideas developed to this point that for public schools to be organized in an effective manner, then each of the positions, except that of teacher, should be accorded the requisitely - rational authority over subordinates that was summarized on pages 13 and 14. It is absolutely clear that this is not presently the case. Vice Principals, for example, do not normally delegate tasks or assign resources to department heads, nor have the power to veto appointments to these positions. Neither do they evaluate department heads, or have the authority to recommend dismissal or deselection[5]. However, this particular anomaly can be eliminated if we follow Jaques' (1976:128-132) recommendation and identify all 'vice', 'deputy' and 'assistant' positions as essentially quasi-administrative. Thus the assistant superintendent can be viewed as a staff assistant to the Chief Executive Officer and the Chief Executive Officer - Assistant - Principal linkage becomes as shown in Figure 3.

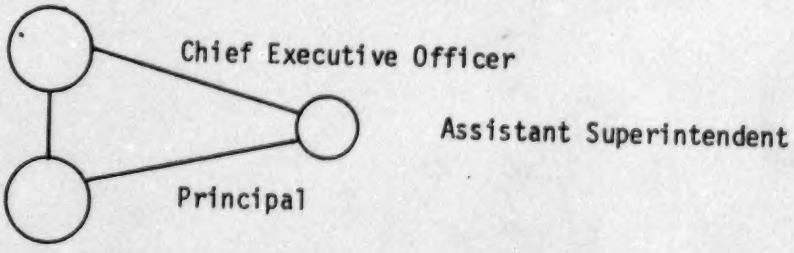

Figure 3

In terms of requisitely-rational authority chains, this means that the principal is responsible to and held accountable by the Chief

Executive Officer, not the Assistant Superintendent. Similarly, the Department Heads are directly accountable to the Principal with the Vice-Principal aiding the Principal in his overall control and coordination of the school.

The presence of administrative assistants that appear to occupy hierarchically distinct levels of authority, but do not actually exercise discrete authority by themselves, is identified by Jaques (1976: 130-131) as a common phenomenon in all kinds of modern organizations, especially those in which collegiality and team work are frequently cited as operative norms. One major result of this is to mask and confuse the operative authority structure. As Jaques (1976:131-132) observes, "... it is never possible to tell from an organizational chart just who is manager of whom: in effect it is a wise manager (or subordinate) who knows his own subordinate (or manager)."

Carrying this enquiry into operative structures further, we may profitably ask "to whom are teachers accountable?"

It may not be unreasonable to argue that department heads occupy a role that is similar to that of corporals in army platoons or charge hands in factories. They are selected from their peers because of apparent managerial and/or leadership qualities and are assigned a number of coordinative and monitoring tasks, but they do not normally exercise authority as that term has been used in this paper, and are required to refer major decisions to the principal or his assistant[6].

The organizational structure in public schools has now been reduced to two extant[7] authority positions within the school and one major accountability triad that extends to the Chief Executive Officer level. Figure 4 outlines this structure.

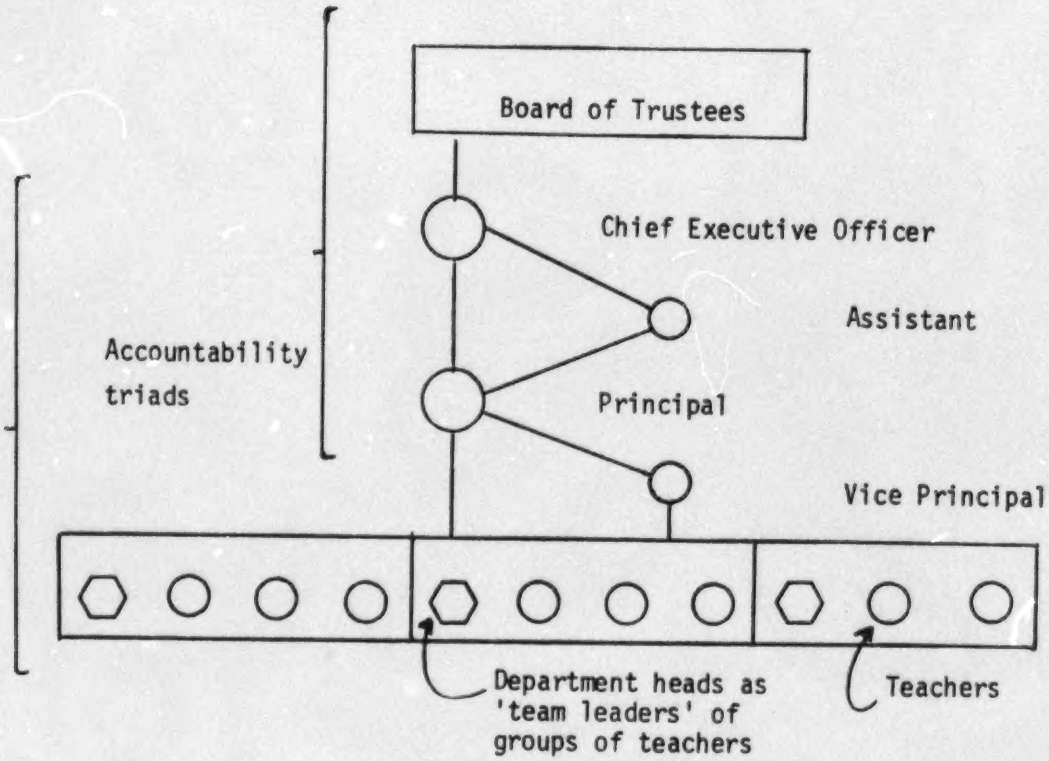

Figure 4

EXTANT STRUCTURE IN
A PUBLIC SCHOOL SYSTEM

If this outline is reasonably congruent to the extant authority relationships in public schooling systems (and the assumption at this time is that it is) then a number of straightforward statements can be made regarding the improvement of organizational effectiveness in schools:

1. Principals should make all the major work assignments among the school staff. This does not include all day-to-day or even year-to-year specification of duties, but would include assignment of teachers to classes, courses and other major duties. The Vice Principal and Department Heads may assist and advise in such scheduling, but the final decision must rest with the principal.

2. Similarly the principal should allocate all major resources required for the completion of teaching tasks. In schools, these will include the amount of time allotted to courses and the space within which teaching activities will occur. In other words one of the Principal's major tasks is that of timetabling.

3. Principals should have the authority to veto any staff appointment in their school. By extension this means that the Chief Executive Officer should not be allowed to assign or transfer staff to the school without obtaining the Principal's agreement, especially if this will lock a teacher into a particular assignment, as in the case of specialists. Point 2 above also implies that major time-tabling decisions should not be made by superordinates.

4. Principals should be fully responsible for evaluating their teachers and other staff. This could well include freedom of choice as to the method of assessment to be used.

5. Principals should also be accorded the authority to place (subject to appropriate procedures) a negative report on any of their assigned staff in the personnel file of the person concerned, and could also be allowed other formalized sanctions.

6. Final decisions regarding the dismissal or deselection of any staff member in the school should be made by the Principal, although executive action will be taken by the Chief Executive Officer.

The Chief Executive Officer should, of course, be accorded similar authority over the Principals, but should not be expected to 'interfere' with their requisitely-rational exercise of authority. If there is real reason for concern regarding competency of any Principal, then he should be subject to the same penalties that he may administer to his subordinates.

A number of practical implications for the improvement of school effectiveness follow:

1. If the structural analysis offered above is reasonably accurate, then one way in whcih organizational effectiveness in schools could be improved would be to accord Principals more authority than they would seem to exercise presently, and redefine the intermediate assistantship positions to make the limits of the authority to be exercised by incumbents clear to other staff members.

2. This also implies that communications networks in schools could be restructured to place teachers and Principal in more direct contact.

3. Given that it is Principals who are to be held responsible for teacher performance, then the apparently common distribution of tasks between Vice Principals and Principals could be redefined. Vice Principals, for example, could be assigned to a number of environmentally oriented tasks: dealing with some visitors;

attending some out-of-school system and community meetings; etc. This would more effectively buffer the Principal and the Principal-teacher linkage from environmental turbulence. Regardless, it would seem that Principals should spend a considerable amount of their time in the school and in contact with the teachers.

4. Management by objectives contracts between the Principal and his staff (especially department heads and through them teachers or whole departments) would seem to offer one way of more clearly defining the accountability linkage.

5. School based budgetting approaches would also seem to be suggested by the view taken here: Principals should be more directly accountable for their use of system resources.

6. Teacher access to Principals, and Chief Executive Officers could well be improved. Intermediary hierarchical positions may well hinder direct contact between these positions. But if the accountability triad is to work effectively, teachers should have easy access to Principals and both should be able to take disputes or major problems to the Chief Executive Officer.

An Alternative View

The analysis above assumes that the major technology of public schools is classroom teaching, and envisages the technical core of schools as located in classrooms. The accountability triad therefore rests on the classroom teacher and norms of calculable rationality are held to be relevant. However this view could be inaccurate. Recent conceptual analysis (Allison, 1980) suggests that there could well be two loosely coupled technologies operating in public schooling systems. Classroom teaching, that is to say teacher planning, delivery and evaluation of lessons to classes, appears as an intensive small batch type of technology, whereas the direction and coordination of students through the grade and subject curriculum of territorial school systems, and the necessary management of resources associated with this, is highly similar to long-linked process type technologies. This distinction suggests that two different kinds of rationality are relevant in public schools. The system

wide process technology is relatively determinant, calculable and intellectually rational. On the other hand, classroom teaching is much less determinant. Individual style, experience and ideology would all seem to be important elements. Furthermore, the actual craft of teaching has a number of highly traditional, and to some degree, charismatic elements. Thus the linkage between classrooms and teachers and the administrative core of schooling systems may be loose and relatively weak. This view is supported by recent empirical research reported by Deal and Celotti (1980). Furthermore, classrooms are not well buffered from the environment, but the opposite would seem to obtain with the long-linked management technology.

If this view is reasonably accurate then the prescriptions for increased effectiveness advanced above could be groundless, unless Principals can perform the potentially difficult feat of managing the two potentially conflicting kinds of organizational and technical rationality associated with the two technologies. On one hand they must manage the demands of the intellectually rational process technology of the school system; on the other the more open, traditional and potentially non-rational technology of the classroom. Hence the parable of the spindle may well be relevant to schools, for the main task of the Principal could be to buffer his teachers from disturbing influences. But in this case the situation is reversed from that in Porter's parable, for the disturbing influences emanate not just from the environment but also from a hierarchically superordinating technology.

On reflection this would seem to strengthen the argument for increased authority for Principals. The whole idea behind requisitely-rational authority is that of two way accountability. If teachers are

to be accountable to Principals (and this would seem rational) then Principals should requisitely be accountable to teachers. Thus it would seem wise to let principals run their own schools as they see fit within the limits of the externally imposed system of order, on the understanding that they will let their teachers get on with their craft without an undue amount of interference from system administrators and their overly bureaucratic technology.

FOOTNOTES

1. The analyses of the psychologist and the anthropologist are taken directly from Porter. His third analyst was a sociologist, thus the student of organizational effectiveness is an imposter in the original list of dialogue, as is his monologue.

2. Including the current political acceptability of the conceptual model employed and the personal impression made by the consultant. Bureaucracy, for example, is 'out', contingency is 'in', which poses some difficulties for this paper which argues in part that bureaucracy still offers a highly workable conceptual frame for analysis, diagnosis and action.

3. Except, of course, in establishments like Macdonalds, where the spindle problem has been solved by eliminating individual server/cook roles by combining functions.

4. This reason would be crucial of course in the case of 'fast food' eating places. Note however that the redesigned organizational structure proposed here is quite common in prestige restaurants. These organizations also tend to reverse the authority positions proposed here: cooks are responsible to the chef, but he and the waiters are both responsible to the headwaiter.

5. This is a term proposed by Jaques. It means that an employee is removed from an assigned position but is retained (reassigned) within the organization.

6. This view may well be faulty, for in some schools department heads may indeed be held fully accountable by the Principal for the performance of their teachers. However, it is assumed that this is not the typical arrangement.

7. Jaques distinguishes between manifest (publically described), assumed (by participants) and extant (actual and operative) organizational structures. He also discusses the depth structure of organizations which has important implications for designing requisite and highly effective organizations. Space limitations prohibit consideration of this concept here.

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